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Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL
For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT	($)	500.00

Complete if Known	
Application Number	09/825,045
Filing Date	04/03/2001
First Named Inventor	Mirolav Trajkovic
Examiner Name	Stella L. Woo
Art Unit	2614
Attorney Docket No.	US01068

METHOD OF PAYMENT (check all that apply)

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FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES Fee ($)	FILING FEES Small Entity Fee ($)	SEARCH FEES Fee ($)	SEARCH FEES Small Entity Fee ($)	EXAMINATION FEES Fee ($)	EXAMINATION FEES Small Entity Fee ($)	Fees Paid ($)
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee ($)	Small Entity Fee ($)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee ($)	Fee Paid ($)
_____ - 20 or HP =	_____	x _____	= _____

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims	Extra Claims	Fee ($)	Fee Paid ($)
_____ - 3 or HP =	_____	x _____	= _____

HP = highest number of independent claims paid for, if greater than 3.

Multiple Dependent Claims Fee ($)	Fee Paid ($)
_____	_____

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee ($)	Fee Paid ($)
_____ - 100 =	_____	/ 50 = _____ (round up to a whole number)	x _____	= _____

4. OTHER FEE(S)

	Fees Paid ($)
Non-English Specification, $130 fee (no small entity discount)	
Other (e.g., late filing surcharge): Fee for filing of Appeal Brief	500

SUBMITTED BY

Signature	James D. Leimbach	Registration No. (Attorney/Agent) 34,374	Telephone (585) 381-9983
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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission	20

Application Number	09/825,045
Filing Date	04/03/2001
First Named Inventor	Miroslav Trajkovic
Art Unit	2643
Examiner Name	Stella L. Woo
Attorney Docket Number	US010168

ENCLOSURES *(Check all that apply)*

- [x] Fee Transmittal Form
  - [x] Fee Attached
- [ ] Amendment/Reply
  - [ ] After Final
  - [ ] Affidavits/declaration(s)
- [ ] Extension of Time Request
- [ ] Express Abandonment Request
- [ ] Information Disclosure Statement
- [ ] Certified Copy of Priority Document(s)
- [ ] Reply to Missing Parts/ Incomplete Application
  - [ ] Reply to Missing Parts under 37 CFR 1.52 or 1.53
- [ ] Drawing(s)
- [ ] Licensing-related Papers
- [ ] Petition
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- [ ] Power of Attorney, Revocation Change of Correspondence Address
- [ ] Terminal Disclaimer
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- [ ] CD, Number of CD(s) _____
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- [ ] After Allowance Communication to TC
- [ ] Appeal Communication to Board of Appeals and Interferences
- [x] Appeal Communication to TC **(Appeal Notice, Brief, Reply Brief)**
- [ ] Proprietary Information
- [ ] Status Letter
- [ ] Other Enclosure(s) (please Identify below):

Remarks

Enclosed is an Appeal Brief and the required fee.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	LEIMBACH ASSOCIATES		
Signature	James D. Leimbach		
Printed name	James D. Leimbach		
Date	July 16, 2006	Reg. No.	34,374

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Signature	James D. Leimbach		
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of
Miroslav Trajkovic et al.

Title: ACTIVE NOISE CANCELING HEADSET AND DEVICES WITH SELECTIVE NOISE SUPPRESSION

Serial No. 09/825,045

Filed: April 3, 2001

Confirmation No. 1991

Group Art Unit: 2614

Examiner: Stella L. Woo

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APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Real party in interest

The real party of interest is the Assignee who is U. S. Philips Corporation, a corporation existing under the laws of the State of Delaware (hereinafter Appellant).

Related appeals and interferences

There are no related appeals or interferences to the present application that are known to appellants, the appellant's legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

Status of the Claims

Claims 1, 3, 7-18 and 20 are drawn to a method and device for selective noise canceling including an audio classifier operative through use of audio content analysis algorithms to determine if a desired external signal should be suppressed. A copy of appealed claims 1, 3, 7-18 and 20 is contained in Appendix III following this brief.

Status of the Amendments After Final

A response was filed subsequent to the final rejection to overcome the examiner's rejection of claims 1, 3, 7-18 and 20 under 35 U.S.C. §102(e). The examiner in an Advisory Action dated May 9, 2006 indicated that the rejections of claims 1, 3, 7-18 and 20 under 35 U.S.C. §102(e) stand.

Summary of the Claimed Subject Matter

The appealed claims define subject matter for a method and device for selective noise canceling including an audio classifier operative through use of audio content analysis algorithms to determine if a desired external signal should be suppressed.

Appealed claim 1 defines subject matter for a selective noise canceling headset, having: at least one earpiece (110-1, 110-2) as illustrated in Figure 1 for reproducing a selected

audio signal; and a microphone (150) as illustrated in Figures 1 and 2 for monitoring an external audio signal in a vicinity of the headset 9 (as described in the specification on page 4, line 22-page 6, line 5).

Appealed claim 1 further defines subject matter for a selective noise suppression circuit (200, 200, 200', 200'') as illustrated in, respectively, Figures 2, 3, 4 and 5 for analyzing the external audio signal, including: an audio classifier coupled (310, 410, 510) to the microphone (150) for receiving the external audio signal, the audio classifier (310, 410, 510) being operative through use of audio content analysis algorithms (as discussed in the specification on page 6, lines 15-22), to analyze the audio content of the external audio signal to determine if at a given time a segment is a desired external signal (as discussed in the specification on page 6, lines 10-15), and if so to output a "use signal," but if not to output a "suppress signal," (as discussed in the specification on page 6, lines 29-33; and page 7, lines 22-25), the desired external signal segment(s) including any one or combination of an audio alarm signal, a dog barking, and speech directed to a user of the earpiece (as discussed in the specification on page 7, lines 1-19).

Appealed claim 1 further defines subject matter for a noise canceling circuit (340, 440, 540) for receiving both a selected audio signal and said external audio signal, and being responsive to the presence of said use signal to pass at least a portion of said external audio signal along with said selected audio signal for reproduction, and responsive to the presence of said suppress signal to prevent passage of at least a portion of said external signal, the noise canceling circuit also being selectively operable for canceling said selected audio signal during the presence of said use signal (as discussed in the specification on page 7, lines 1-12), wherein said audio classifier can initiate a recorded message responsive to said external audio signal indicating a predefined audio segment (as discussed in the specification on page 8, lines 12-19).

Appealed claim 8 defines subject matter for a selective noise canceling device, having a microphone (150) as illustrated in Figures 1 and 2 for monitoring an external audio signal (as described in the specification on page 4, line 22-page 6, line 5).

Appealed claim 1 further defines subject matter for a selective noise suppression circuit (200, 200, 200', 200'') for analyzing said external audio signal, including as illustrated in, respectively, Figures 2, 3, 4 and 5.

Appealed claim 1 further defines subject matter for an audio classifier (310, 410, 510) coupled to the microphone (150) for receiving the external audio signal, the audio classifier (310, 410, 510) being operative through use of content-based audio segmentation analysis techniques (as discussed in the specification on page 6, lines 15-22), to analyze said external audio signal to determine (as discussed in the specification on page 6, lines 10-15) if at a given time a segment is a desired external signal, and if so to output a "use signal," but if not to output a "suppress signal" (as discussed in the specification on page 6, lines 29-33; and page 7, lines 22-25).

Appealed claim 1 further defines subject matter for a noise canceling circuit (340, 440, 540) for receiving said external audio signal, and being responsive to the presence of the use signal to pass at least a portion of said external audio signal, and responsive to the presence of the suppress signal to prevent passage of at least a portion of said external signal for reproduction (as discussed in the specification on page 7, lines 1-12), wherein said audio classifier can initiate a recorded message responsive to said external audio signal indicating a predefined audio segment (as discussed in the specification on page 8, lines 12-19).

Appealed claim 15 defines subject matter for a selective noise canceling method, including: monitoring an external audio signal (as described in the specification on page 4, line 22-page 6, line 5); analyzing said external audio signal through use of content-based audio segmentation, to identify portions thereof that may be of interest to a user (as discussed in the specification on page 6, lines 10-15); amplifying the identified portions of said external audio signal that are of interest; suppressing the portions of said external audio signal not identified (as discussed in the specification on page 6, lines 29-33; and page 7, lines 22-25); and adding the amplified portions of the external audio signal to a selected audio signal for reproduction thereof, wherein a recorded message is added to the amplified portions responsive to the analyzing of the external audio signal indicating a predefined audio segment (as discussed on page 8, lines 12-22.

Grounds of Rejection to be Reviewed on Appeal

The Advisory Action dated May 9, 2006 indicated that the rejections to claims 1, 3, 7-18 and 20 stand. Claims 1, 3, 7-18 and 20 are the appealed claims. Appealed claims 1, 3, 7-18 and 20 are rejected under the provisions of 35 U.S.C. §102(e) has been anticipated

by U.S. Patent Publication No. 2001/0046304 in the name of Rast (hereinafter referred to as *Rast*).

Argument

I. The rejection of appealed claims 11-17 and 19 under the provisions of 35 U.S.C. §102(e) as being anticipated via over *Rast*

A. The rejection under 35 U.S.C. S 102(e)

Appealed claims 1, 3, 7-18 and 20 stand rejected under the provisions of 35 U.S.C. §102(e) as being anticipated by *Rast* (U.S. Patent Publication No. 2001/0046304). The examiner's position is that *Rast* disclose every element defined by appealed claims 1, 3, 7-18 and 20.

The MPEP at §2131 states that a " claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

The MPEP at §2111.01 states that an "applicant is entitled to be his or her own lexicographer and may rebut the presumption that claim terms are to be given their ordinary and customary meaning by clearly setting forth a definition of the term that is different from its ordinary and customary meaning(s)." *In re Paulsen*, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994).

The MPEP at §2111.01 further states where "an explicit definition is provided by the applicant for a term, that definition will control interpretation of the term as it is used in the claim. *Toro Co. v. White Consolidated Industries Inc.*, 199 F.3d 1295, 1301, 53 USPQ2d 1065, 1069 (Fed. Cir. 1999)."

B. The reference

Rast (U.S. Patent Publication No. 2001/0046304) relates selective control of acoustic isolation in headsets (see Title). *Rast* teaches that acoustical isolation can be characterized by the amount of sound attenuation in decibels as a result of acoustical coupling. Acoustical attenuation can be either manual based on user input or automatically based on registered sounds correlated to a set of stored characteristics (see page 1, paragraph 10). The changing of isolations modes can be in response to manual or automatic triggers. The mode can be changed to route external sound to earpieces, replaying the detected sound (an echo back), generating an alert, augmenting noise cancellation with acoustical isolation, amplifying ambient sounds after extracting noise, accentuating spoken sounds, or combinations thereof (see page 2, paragraph 14).

It should be noted that *Rast* teaches that "stored sounds" or "sound characterizations" are retained information about acoustic events to which stored external acoustic events may be correlated (see paragraph 16). *Rast* specifically states that sound can be augmented "by playing back a recorded version of the precise received segment of received sound (an 'echo')."

C. The differences between the invention and the reference

The examiner's position is that *Rast* discloses all the elements defined by the appealed claims. The appealed claims define subject matter for a recorded message that is played responsive to the external audio signal indicating a predefined audio segment is presented. The recorded message defined by the rejected claims is defined in paragraph 27 of the present invention is a prerecorded message.

The examiner asserts that paragraph 23 of *Rast* discloses initiation of a recorded message responsive to the external audio signal. The appellants, respectfully, point out that *Rast* teaches the "playing back of a recorded version of the precise received segment of received sound (an 'echo') which was correlated with the stored selection criterion" (see paragraph 23). The portion of paragraph 23 within *Rast* that the examiner alleges teaches playing the recorded sound associated with the stored selection criterion refers to a sound that was received by the

microphone of the headset, recorded and played back. There is no recorded message as defined by the present application for invention that is played back within *Rast*.

The appellants have the right to be their own lexicographer. The definition supplied to a term by the specification in paragraph 27, as discussed above, is the definition that is to be used for interpretation of that term during prosecution. The examiner is using a definition of the term "a recorded message" that is not consistent with the term as defined by the specification to the present invention.

The appellants, respectfully, assert that *Rast* does not disclose or suggest a recorded message responsive to the external audio signal indicating a predefined audio segment.

Appealed claim 1

Appealed claim 1 defines subject matter for a selective noise canceling headset, including: at least one earpiece for reproducing a selected audio signal; a microphone for monitoring an external audio signal in a vicinity of said headset; and a selective noise suppression circuit for analyzing said external audio signal.

The selective noise suppression circuit includes an audio classifier coupled to said microphone for receiving said external audio signal, said audio classifier being operative through use of audio content analysis algorithms, to analyze the audio content of said external audio signal to determine if at a given time a segment is a desired external signal, and if so to output a "use signal," but if not to output a "suppress signal,". There is no disclosure or suggestion within *Rast* for either a "use signal," or a "suppress signal".

Appealed claim 1 further defines subject matter for the desired external signal segment(s) including any one or combination of an audio alarm signal, a dog barking, and speech directed to a user of the earpiece; and a noise canceling circuit for receiving both a selected audio signal and the external audio signal, and being responsive to the presence of the use signal to pass at least a portion of the external audio signal along with the selected audio signal for reproduction, and responsive to the presence of the suppress signal to prevent passage of at least a portion of the external signal. There is no disclosure or suggestion within *Rast* for either a "use signal," or a "suppress signal", therefore there is no disclosure or suggestion for any response to There is no disclosure or suggestion within *Rast* for either a "use signal," or a "suppress signal".

Appealed claim 1 further defines subject matter the noise canceling circuit also being selectively operable for canceling the selected audio signal during the presence of the use signal, wherein the audio classifier can initiate a recorded message responsive to the external audio signal indicating a predefined audio segment. There is no disclosure or suggestion within *Rast* for initiation of a recorded message responsive to the external audio signal indicating a predefined audio segment as defined by the present application for invention.

Appealed claim 3

Appealed claim 3 defines subject matter for the selective noise canceling headset of appealed claim 1, wherein the reproduced portion of the external audio signal is acoustically distinct from a general background noise of a local environment. There is no disclosure or suggestion within *Rast* for the subject matter for the selective noise canceling headset of appealed claim 1, wherein the reproduced portion of the external audio signal is acoustically distinct from a general background noise of a local environment.

Appealed claim 7

Appealed claim 7 defines subject matter for the selective noise canceling headset of appealed claim 1, wherein the selective noise suppression circuit amplifies portions of the external audio signal to be added to the selected audio signal. There is no disclosure or suggestion within *Rast* for the subject matter for the selective noise canceling headset of appealed claim 1, wherein the selective noise suppression circuit amplifies portions of the external audio signal to be added to the selected audio signal.

Appealed claim 8

Appealed claim 8 defines subject matter for a selective noise canceling device, including: a microphone for monitoring an external audio signal; and a selective noise suppression circuit for analyzing said external audio signal.

The selective noise suppression circuit includes an audio classifier coupled to the microphone for receiving the external audio signal, the audio classifier being operative through use of content-based audio segmentation analysis techniques, to analyze the external audio signal to determine if at a given time a segment is a desired external signal, and if so to output a "use

signal," but if not to output a "suppress signal". There is no disclosure or suggestion within *Rast* for use of content-based audio segmentation analysis techniques, to analyze the external audio signal to determine if at a given time a segment is a desired external signal. There is no disclosure or suggestion within *Rast* for if at a given time a segment is a desired external signal, and if so to output a "use signal," but if not to output a "suppress signal".

Appealed claim 8 further defines subject matter for a noise canceling circuit for receiving the external audio signal, and being responsive to the presence of the use signal to pass at least a portion of the external audio signal, and responsive to the presence of the suppress signal to prevent passage of at least a portion of the external signal for reproduction. There is no disclosure or suggestion within *Rast* for if at a given time a segment is a desired external signal, and if so to output a "use signal," but if not to output a "suppress signal", therefore there is no disclosure or suggestion for any response to a "use signal,"or a "suppress signal".

Appealed claim 8 further defines subject matter for wherein the audio classifier can initiate a recorded message responsive to said external audio signal indicating a predefined audio segment. There is no disclosure or suggestion within *Rast* for the audio classifier to initiate a recorded message responsive to an external audio signal indicating a predefined audio segment as defined by the present application for invention.

Appealed claim 9

Appealed claim 9 defines subject matter for the selective noise canceling device of appealed claim 8, wherein said reproduced portion of said external audio signal is an alarm audio signal. There is no disclosure or suggestion within *Rast* for the selective noise canceling device of appealed claim 8, wherein said reproduced portion of said external audio signal is an alarm audio signal.

Appealed claim 10

Appealed claim 10 defines subject matter for the selective noise canceling device of appealed claim 8, wherein said reproduced portion of said external audio signal is acoustically distinct from a general background noise of a local environment. There is no disclosure or suggestion within *Rast* for the selective noise canceling device of appealed claim 8, wherein said

reproduced portion of said external audio signal is acoustically distinct from a general background noise of a local environment.

Appealed claim 11

Appealed claim 11 defines subject matter for the selective noise canceling device of appealed claim 8, wherein said reproduced portion of said external audio signal is associated with speech directed to a user of said device. There is no disclosure or suggestion within *Rast* for the selective noise canceling device of appealed claim 8, wherein said reproduced portion of said external audio signal is associated with speech directed to a user of said device.

Appealed claim 12

Appealed claim 12 defines subject matter for the selective noise canceling device of appealed claim 8, wherein said selective noise suppression circuit suppresses said external audio signal unless a portion of said external audio signal is likely to be of interest to a user. There is no disclosure or suggestion within *Rast* for the selective noise canceling device of appealed claim 8, wherein said selective noise suppression circuit suppresses said external audio signal unless a portion of said external audio signal is likely to be of interest to a user.

Appealed claim 13

Appealed claim 13 defines subject matter for the selective noise canceling device of appealed claim 8, wherein said selective noise suppression circuit segments said external audio signal and reproduces only a desired portion of said external audio signal that is likely to be of interest to a user. There is no disclosure or suggestion within *Rast* for the selective noise canceling device of appealed claim 8, wherein said selective noise suppression circuit segments said external audio signal and reproduces only a desired portion of said external audio signal that is likely to be of interest to a user.

Appealed claim 14

Appealed claim 14 defines subject matter for the selective noise canceling device of appealed claim 8, wherein said selective noise suppression circuit amplifies portions of said external audio signal to be reproduced. There is no disclosure or suggestion within *Rast* for the

selective noise canceling device of appealed claim 8, wherein said selective noise suppression circuit amplifies portions of said external audio signal to be reproduced.

Appealed claim 15

Appealed claim 15 defines subject matter for a selective noise canceling method, including: monitoring an external audio signal; analyzing said external audio signal through use of content-based audio segmentation. There is no disclosure or suggestion within *Rast* for analyzing external audio signal through use of content-based audio segmentation.

Appealed claim 15 defines subject matter to identify portions thereof that may be of interest to a user; amplifying the identified portions of said external audio signal that are of interest; suppressing the portions of said external audio signal not identified; and adding said amplified portions of said external audio signal to a selected audio signal for reproduction thereof. There is no disclosure or suggestion within *Rast* to identify portions thereof that may be of interest to a user; amplifying the identified portions of said external audio signal that are of interest; suppressing the portions of said external audio signal not identified.

Appealed claim 15 defines subject matter wherein a recorded message is added to amplified portions responsive to the analyzing of said external audio signal indicating a predefined audio segment. There is no disclosure or suggestion within *Rast* for a recorded message as defined by the present application for invention to be added to amplified portions responsive to the analyzing of the external audio signal indicating a predefined audio segment.

Appealed claim 16

Appealed claim 16 defines subject matter for the selective noise canceling method of appealed claim 15, wherein said reproduced portion of said external audio signal is an alarm audio signal. There is no disclosure or suggestion within *Rast* for the selective noise canceling method of appealed claim 15, wherein said reproduced portion of said external audio signal is an alarm audio signal.

Appealed claim 17

Appealed claim 17 defines subject matter for the selective noise canceling method of appealed claim 15, wherein said reproduced portion of said external audio signal is acoustically distinct from a general background selective noise of a local environment. There is no disclosure or suggestion within *Rast* for the selective noise canceling method of appealed claim 15, wherein said reproduced portion of said external audio signal is acoustically distinct from a general background selective noise of a local environment.

Appealed claim 18

Appealed claim 18 defines subject matter for the selective noise canceling method of appealed claim 15, wherein said reproduced portion of said external audio signal is associated with speech directed to a user of said method. There is no disclosure or suggestion within *Rast* for the selective noise canceling method of appealed claim 15, wherein said reproduced portion of said external audio signal is associated with speech directed to a user of said method.

Appealed claim 20

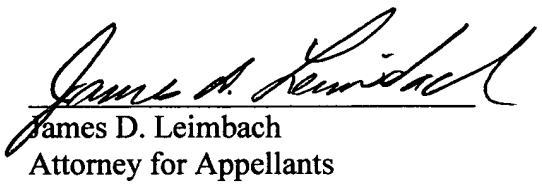
Appealed claim 20defines subject matter for the selective noise canceling method of appealed claim 15, further comprising the step of segmenting said external audio signal and reproducing only a desired portion of said external audio signal that is likely to be of interest to a user. There is no disclosure or suggestion within *Rast* for the selective noise canceling method of appealed claim 15, further comprising the step of segmenting said external audio signal and reproducing only a desired portion of said external audio signal that is likely to be of interest to a user.

Conclusion

In summary, the examiner's rejections of the claims are believed to be in error for the reasons explained above. The rejections of each of claims 1, 3, 7-18 and 20 should be reversed.

The Commissioner is authorized to charge fees associated with the filing of this brief to Account No. 50-3745, including any extension fess and underpayments but excluding the payment of any issue fees, and to credit any overpayments to the same account.

Respectfully submitted,



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APPENDIX I. Evidence on Appeal

"None"

APPENDIX II. Related Proceedings

"None"

APPENDIX III. Claims on Appeal

1. A selective noise canceling headset, comprising:

at least one earpiece for reproducing a selected audio signal;

a microphone for monitoring an external audio signal in a vicinity of said headset; and

a selective noise suppression circuit for analyzing said external audio signal, including:

an audio classifier coupled to said microphone for receiving said external audio signal, said audio classifier being operative through use of audio content analysis algorithms, to analyze the audio content of said external audio signal to determine if at a given time a segment is a desired external signal, and if so to output a "use signal," but if not to output a "suppress signal," said desired external signal segment(s) including any one or combination of an audio alarm signal, a dog barking, and speech directed to a user of said earpiece; and

a noise canceling circuit for receiving both a selected audio signal and said external audio signal, and being responsive to the presence of said use signal to pass at least a portion of said external audio signal along with said selected audio signal for reproduction, and responsive to the presence of said suppress signal to prevent passage of at least a portion of said external signal, said noise canceling circuit also being selectively operable for canceling said selected audio signal during the presence of said use signal, wherein said audio classifier can initiate a recorded message responsive to said external audio signal indicating a predefined audio segment.

3. The selective noise canceling headset of claim 1, wherein said reproduced portion of said external audio signal is acoustically distinct from a general background noise of a local environment.

7. The selective noise canceling headset of claim 1, wherein said selective noise suppression circuit amplifies portions of said external audio signal to be added to said selected audio signal.

8. A selective noise canceling device, comprising:

a microphone for monitoring an external audio signal; and

a selective noise suppression circuit for analyzing said external audio signal, including:

an audio classifier coupled to said microphone for receiving said external audio signal, said audio classifier being operative through use of content-based audio segmentation analysis techniques, to analyze said external audio signal to determine if at a given time a segment is a desired external signal, and if so to output a "use signal," but if not to output a "suppress signal"; and

a noise canceling circuit for receiving said external audio signal, and being responsive to the presence of said use signal to pass at least a portion of said external audio signal, and responsive to the presence of said suppress signal to prevent passage of at least a portion of said external signal for reproduction, wherein said audio classifier can initiate a recorded message responsive to said external audio signal indicating a predefined audio segment.

9. The selective noise canceling device of claim 8, wherein said reproduced portion of said external audio signal is an alarm audio signal.

10. The selective noise canceling device of claim 8, wherein said reproduced portion of said external audio signal is acoustically distinct from a general background noise of a local environment.

11. The selective noise canceling device of claim 8, wherein said reproduced portion of said external audio signal is associated with speech directed to a user of said device.

12. The selective noise canceling device of claim 8, wherein said selective noise suppression circuit suppresses said external audio signal unless a portion of said external audio signal is likely to be of interest to a user.

13. The selective noise canceling device of claim 8, wherein said selective noise suppression circuit segments said external audio signal and reproduces only a desired portion of said external audio signal that is likely to be of interest to a user.

14. The selective noise canceling device of claim 8, wherein said selective noise suppression circuit amplifies portions of said external audio signal to be reproduced.

15. A selective noise canceling method, comprising:

monitoring an external audio signal;

analyzing said external audio signal through use of content-based audio segmentation, to identify portions thereof that may be of interest to a user;

amplifying the identified portions of said external audio signal that are of interest;

suppressing the portions of said external audio signal not identified; and

adding said amplified portions of said external audio signal to a selected audio signal for reproduction thereof, wherein a recorded message is added to said to said amplified portions responsive to the analyzing of said external audio signal indicating a predefined audio segment.

16. The selective noise canceling method of claim 15, wherein said reproduced portion of said external audio signal is an alarm audio signal.

17. The selective noise canceling method of claim 15, wherein said reproduced portion of said external audio signal is acoustically distinct from a general background selective noise of a local environment.

18. The selective noise canceling method of claim 15, wherein said reproduced portion of said external audio signal is associated with speech directed to a user of said method.

20. The selective noise canceling method of claim 15, further comprising the step of segmenting said external audio signal and reproducing only a desired portion of said external audio signal that is likely to be of interest to a user.